

## WHAT IS CLAIMED IS:

1. An intravascular flow modifier and vascular reinforcement device to be used in the intravascular treatment of blood vessels, comprising:

an elongate strand of resilient material having first and second proximal ends respectively connected by first and second legs of the elongate strand of resilient material to a distal middle loop of the elongate strand of resilient material, said first and second proximal ends being joined to a deployment device, said first and second legs of the elongate strand of resilient material forming a double strand of a plurality of sinusoidal loops having upper and lower arcs, said sinusoidal loops extending along a longitudinal axis intersecting said deployment device, said upper and lower arcs of said sinusoidal loops being curved about said longitudinal axis to form a hollow cylindrical circumferential pattern of loops about said longitudinal axis.

2. The intravascular flow modifier and vascular reinforcement device of Claim 1, wherein a plurality of said elongate strands are joined to said deployment device.

3. The intravascular flow modifier and vascular reinforcement device of Claim 1, wherein each of the first and second legs have proximal, intermediate and distal regions, said proximal and distal regions of said first and second legs of sinusoidal loops being more tightly coiled than said intermediate regions of said first and second legs of sinusoidal loops to thereby provide a greater contact surface area for anchoring of said proximal and distal regions within a vessel.

4. The intravascular flow modifier and vascular reinforcement device of Claim 1, wherein each of the first and second legs have proximal, intermediate and distal regions, said proximal and distal regions of said first and second legs of sinusoidal loops having a larger diameter than said intermediate regions of said first and second legs of sinusoidal loops to thereby provide a greater radial contact force for anchoring of said proximal and distal regions within a vessel.

5. The intravascular flow modifier and vascular reinforcement device of Claim 1, wherein each of the first and second legs have proximal, intermediate and distal regions, said intermediate regions of said first and second legs of sinusoidal loops having squared sinusoidal loops.

6. The intravascular flow modifier and vascular reinforcement device of Claim 1, wherein said elongate strand of resilient material is a stranded cable.

7. The intravascular flow modifier and vascular reinforcement device of Claim 1, wherein said elongate strand of resilient material is made of a superelastic material.

8. The intravascular flow modifier and vascular reinforcement device of Claim 7, wherein said superelastic material is a nickel-titanium alloy.

9. The intravascular flow modifier and vascular reinforcement device of Claim 1, wherein said elongate strand of resilient material is made of a shape memory material.

10. The intravascular flow modifier and vascular reinforcement device of Claim 9, wherein said shape memory material is a nickel titanium alloy.

11. The intravascular flow modifier and vascular reinforcement device of Claim 9, wherein said shape memory material is a shape memory polymer.

12. The intravascular flow modifier and vascular reinforcement device of Claim 1, further comprising an outer covering formed from a covering material selected from the group consisting of polyethylene terephthalate, polytetrafluoroethylene, polyamide, polyurethane, and liquid crystal polymer.

13. The intravascular flow modifier and vascular reinforcement device of Claim 12, wherein said polyamide is a nylon.

14. The intravascular flow modifier and vascular reinforcement device of Claim 12, wherein said covering material is woven.

15. The intravascular flow modifier and vascular reinforcement device of Claim 12, wherein said covering material is formed as a fiber.

16. The intravascular flow modifier and vascular reinforcement device of Claim 12, wherein said covering material is formed as a ribbon.

17. The intravascular flow modifier and vascular reinforcement device of Claim 1, wherein the elongate strand of resilient material is coated with a hydrophilic material.

18. The apparatus of Claim 1, said elongate strand of resilient material further comprising at least one intermediate loop between said first and second legs and said distal middle loop, said at least one intermediate loop extending radially outward from said longitudinal axis in said expanded configuration so as to allow said at least one intermediate loop to extend into an aneurysm extending from the vessel.

19. The apparatus of Claim 18, wherein said at least one intermediate loop has a rounded configuration in said expanded configuration.

20. The apparatus of Claim 18, wherein said at least one intermediate loop has an oval configuration in said expanded configuration.

21. An apparatus for removing clots from the vasculature of a patient, comprising:

an elongate strand of resilient material having first and second proximal ends respectively connected by first and second legs of the elongate strand of resilient material to a distal middle loop of the elongate strand of resilient material, said first and second proximal ends being non-detachably joined to a deployment device, said first and second legs of the elongate strand of resilient material forming a double strand of a plurality of sinusoidal loops having upper and lower arcs, said sinusoidal loops extending along a longitudinal axis intersecting said deployment device, said upper and lower arcs of said sinusoidal loops being curved about said longitudinal axis, said elongate strand of resilient material being movable from an initial compressed configuration to an expanded configuration extending outwardly from the longitudinal axis to trap and hold clots within a vessel, the elongate strand of resilient material being adapted to be placed within the vessel of the patient when the elongate strand of resilient material is in the compressed configuration and removed from the vessel when the elongate strand of resilient material is in the expanded configuration, whereby clots trapped by the loops can be withdrawn from the vessel.

22. The apparatus of Claim 21, wherein said upper and lower arcs of said sinusoidal loops form a hollow conical circumferential pattern of loops about said longitudinal axis in said expanded configuration.